

Fundamental physics with neutrons at the ESS

Nordita workshop

Dec. 10th-14th Stockholm

Contribution list

A. SEREBROV (PNPI)	UCN facility at VVRM
Dr. BAESSLER, S. (U. Virginia, ORNL)	An attempt to discuss the "ultimate" determination of correlation coefficients in neutron beta decay
Dr. BODEK, K. (J. U. Krakow)	Measurements of correlation coefficients with electron tracking and electron spin determination
CIRIGLIANO, V. (LANL)	Most promising strategy for future measurements in neutron beta decay: a theory view
GRIFFITH, C. (U. Sussex)	Cryo nEDM
CRAWFORD, C. (U. Kentucky)	NN weak interaction experiment opportunities at the ESS
Dr. CZARNECKI, A. (Alberta U.)	Precise theory predictions in neutron decay
BOWMAN, D. (ORNL)	NOPTREX time reversal violation experiment and NN weak interactions
DEV, BHUPAL (Washington Uni.)	Baryogenesis, Light Dark Matter, Neutron-Antineutron Oscillation and Collider Signals
EVAN BERKOWITZ (Juelich)	Lattice gauge theory calculations of NN weak amplitudes
Dr. FALKOWSKI, A. (LPT Orsay CNRS)	ESS in the Future HEP landscape
PIEGSA, F. (Bern)	nEDM
FOMIN, Alexey (PNPI NRC KI)	Project of an experiment to search for neutron-antineutron oscillations at reactor WWR-M
FRY, Jason (U. Virginia, Indiana)	Present status of the NN weak interaction and recent results
GARDNER, S. (U. Kentucky)	Processes that break baryon number by two units and their implications
Dr. GORSHTeyN, M. (U. Mainz)	Precise theory predictions in neutron beta decay: current limitations and challenges
GROJEAN, C (DESY Humboldt. U.)	Implications of an Improved Neutron-Antineutron Oscillation Search for Baryogenesis: A Minimal Effective Theory Analysis
JWA, Yeon-jae (Columbia U.)	nnbar and dinucleon decay at DUNE
LIBERTAD, Barron-Palos (Mexico U.)	Results from the NPDGamma n-p weak interaction experiment at SNS
MICHELLE, V. (INFN-Pisa)	Nonleptonic weak interactions in NN and few nucleon systems
Dr. MärKISCH, B. (TUM)	Magnet concept for measurements of neutron decay correlations at the ESS
NESVIZHEVSKY, V. (ILL)	A new operating mode in experiments searching for free neutron-antineutron oscillations
	based on coherent neutron and antineutron mirror reflections
Dr. PATTIE, Robert (LANL)	UCNtau and prospects of neutron lifetime measurements
PHILIPP SCHMIDT WELLENBURG (PSI, Villigen)	nEDM
RICHARD, J-M (IPN, Lyon U.)	neutron-antineutron oscillations in nuclei
RINALDI, E. (RIKEN BNL)	Lattice calculations for nnbar
RINALDI, E. (RIKEN BNL)	First-principles lattice QCD calculations of the neutron beta decay: challenges and prospects
SWANK, C. (Caltech)	nEDM at SNS
T.M. Ito (LANL)	nEDM Los Alamos
VAINSHTEIN, A. (Minnesota U.)	Neutron-antineutron oscillations

Dr. VANDEVENDER, B. (PPNL)	Cyclotron radiation spectroscopy for neutron decay
GUDKOV, V. (U. South Carolina)	Parity odd and time reversal odd NN interactions
Nesvizhevsky, V. (ILL)	Search for new Physics at ILL
BARROW, J. (U. Tennessee)	Sensitivity of HBEAM at ESS/ANNI to nn' search
YOUNG, Albert	Search for nn' by spin rotation
TANG Z. (LANL)	Proposed UCNProbe Experiment to Measure Branching n->p/n-> all
BROUSSARD, L. (ORNL)	Search for nn' at HFIR reactor at ORNL
KIRCH, K. (PSI, ETH)	Analysis of Current nn' Search Experiment at PSI
BIONDI, R (U. L'Aquila and LNGS)	Analysis of nn' Experiments at ILL/Grenoble
KAMYSHKOV, Y. (U. Tennessee)	Neutron Transition Magnetic Moment and nn'
MANNERELLI M. (LNGS)	The nn' Conversion and Neutron Stars
NESTI, F. (U. L'Aquila)	DM Distribution in Galaxies - Does It Limit MM?
	New results of DM search with MM
BELLI, P. (INFN, Rome II)	as a possible candidate
DOLGOV (ITEP and Novosibirsk U.)	Viewing Cosmological Issues with Mirror Matter
NUSSINOV S. (Tel-Aviv U.)	Theoretical issues in nn'
BEREZHIANI Z. (L'Aquila and LNGS)	The nn' oscillations and neutron lifetime
MISHIMA, K. (KEK)	Neutron Lifetime Measurement Using Pulsed Neutron at J-PARC
Serebrov A. (PNPI)	Neutron lifetime and sterile oscillations
PICKER R. (TRIUMF)	nEDM at TRIUMF
MILSTEAD; D (Stockholm Uni.)	The HIBEAM Experiment
SOLDNER, T. (ILL)	The ANNI Experiment
DEGENKOLB S. (ILL)	A He UCN source concept for the ESS
PIGNOL, G (Uni. Grenoble Alpes)	neutron EDM: strategies to confront the systematics